



## Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Hexavalent Chromium ICP Standard, 10,000 ppm Cr<sup>6+</sup> in 5% HCl

**Product Number:** PCR610KH

**Other Identifying Product Numbers:** PCR610KH-100, PCR610KH-50, PCR610KH-500

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Ricca Chemical Company

**Address:** 448 West Fork Drive

Arlington, TX 76012 USA

**Telephone:** 888-467-4222

#### 1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA)

800-424-9300

CHEMTREC (International)

1+ 703-527-3887

# Safety Data Sheet

## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

| Hazard Class                                   | Category   | Hazard Statements | Precautionary Statements:   |
|--|------------|-------------------|---|
| Acute Toxicity - Oral                          | Category 3 | H301              | P264, P270, P301+P310, P321, P330, P405, P501   |
| Acute Toxicity - Inhalation                    | Category 4 | H332              | P261, P271, P304+P340, P312   |
| Skin Corrosion / Irritation                    | Category 1 | H314              | P260, P264, P280, P301+P330+P331, P303+P361+P353, P363, P304+P340, P310, P321, P305+P351+P338, P405, P501 |
| Eye Damage / Irritation                        | Category 2 | H319              | P264, P280, P305+P351+P338, P337+P313   |
| Respiratory Sensitizer                         | Category 1 | H334              | P261, P285, P304+P341, P342+P311, P501  |
| Skin Sensitizer                                | Category 1 | H317              | P261, P272, P280, P302+P352, P332+P313, P321, P363, P501  |
| Germ Cell Mutagenicity                         | Category 2 | H341              | P201, P202, P280, P308+P313, P405, P501   |
| Carcinogenicity                                | Category 1 | H350              | P201, P202, P280, P308+P313, P405, P501   |
| Reproductive Toxicity                          | Category 1 | H360              | P201, P202, P280, P308+P313, P405, P501   |
| Corrosive to Metals                            | Category 1 | H290              | P234, P390, P406  |
| Hazardous to the Aquatic Environment (Acute)   | Category 3 | H402              | P273, P501  |
| Hazardous to the Aquatic Environment (Chronic) | Category 2 | H411              | P273, P391, P501  |

### 2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

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### Hazard Statements:

| Hazard Number | Hazard Statement   |
|---------------|--|
| H290          | May be corrosive to metals.  |
| H301          | Toxic if swallowed.  |
| H314          | Causes severe skin burns and eye damage.                                   |
| H317          | May cause an allergic skin reaction.                                       |
| H319          | Causes serious eye irritation.   |
| H332          | Harmful if inhaled.  |
| H334          | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H341          | Suspected of causing genetic defects.                                      |
| H350          | May cause cancer.  |
| H360          | May damage fertility or the unborn child.                                  |
| H402          | Harmful to aquatic life.   |
| H411          | Toxic to aquatic life with long lasting effects.                           |

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**Precautionary Statements:**

| Precautionary Number | Precautionary Statement  |
|----------------------|--|
| P201                 | Obtain special instructions before use.  |
| P202                 | Do not handle until all safety precautions have been read and understood.  |
| P234                 | Keep only in original container.   |
| P260                 | Do not breathe fumes, mist, vapors, or spray.  |
| P261                 | Avoid breathing fumes, mist, vapors, or spray.   |
| P264                 | Wash arms, hands and face thoroughly after handling.   |
| P270                 | Do not eat, drink or smoke when using this product.  |
| P271                 | Use only outdoors or in a well-ventilated area.  |
| P272                 | Contaminated work clothing must not be allowed out of the workplace.   |
| P273                 | Avoid release to the environment.  |
| P280                 | Wear protective gloves and eye protection.   |
| P285                 | In case of inadequate ventilation wear respiratory protection.   |
| P301+P310            | IF SWALLOWED: Immediately call a POISON CENTER or physician.   |
| P301+P330+P331       | IF SWALLOWED: rinse mouth. Do NOT induce vomiting.   |
| P302+P352            | IF ON SKIN: Wash with plenty of soap and water.  |
| P303+P361+P353       | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.                                     |
| P304+P340            | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P304+P341            | IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.                            |
| P305+P351+P338       | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P313            | IF exposed or concerned: Get medical attention.  |
| P310                 | Immediately call a POISON CENTER or physician.   |
| P312                 | Call a POISON CENTER or physician if you feel unwell.  |
| P321                 | Specific treatment (Wash areas of contact with water immediately).   |
| P330                 | Rinse mouth.   |
| P332+P313            | If skin irritation occurs: Get medical attention.  |
| P337+P313            | If eye irritation persists: Get medical attention.   |
| P342+P311            | If experiencing respiratory symptoms: Call a POISON CENTER or physician.   |
| P363                 | Wash contaminated clothing before reuse.   |
| P390                 | Absorb spillage to prevent material damage.  |
| P391                 | Collect spillage.  |
| P405                 | Store locked up.   |
| P406                 | Store in corrosive resistant container with a resistant inner liner.   |
| P501                 | Dispose of contents in accordance with local, state, federal and international regulations.                                      |

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## 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

| Chemical Name       | Formula  | Molecular Weight | CAS Number | Weight% |
|---------------------|--|------------------|------------|---------|
| Water               | H <sub>2</sub> O   | 18.01 g/mol      | 7732-18-5  | 95.48   |
| Ammonium Dichromate | (NH <sub>4</sub> ) <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub> | 252.06 g/mol     | 7789-09-5  | 2.38    |
| Hydrochloric Acid   | HCl  | 36.46 g/mol      | 7647-01-0  | 2.14    |

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, and tearing.

**Inhalation:** IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

**Skin Contact:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. May cause irritation, redness, and pain.

**Ingestion:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Do not induce vomiting. Give large quantity of water. Call a physician immediately.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Toxic if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child. Corrosive Liquid. May be fatal if swallowed. Contains a known carcinogen. Avoid contact with skin, eyes, and clothing. Avoid breathing vapor. If swallowed, do not induce vomiting. Dilute with water and call a physician. Wash areas of contact with plenty of water. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness, and pain. CHRONIC EFFECTS / CARCINOGENICITY: Repeated or prolonged exposure can cause ulceration and perforation of the nasal septum, respiratory irritation, liver and kidney damage and ulceration of the skin. Ulcerations at first may be painless, but may penetrate to the bone producing "chrome holes." Known to be a human carcinogen.

### 4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Do not induce vomiting. Give large quantity of water. Call a physician immediately.



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### SECTION 5: Fire-Fighting Measures

#### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

#### 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard. May react with metals to release flammable Hydrogen gas.

#### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

### SECTION 6: Accidental Release Measures

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

#### 6.2. Cleanup and Containment Methods and Materials

Absorb with suitable inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal. Do not flush to sewer. Dispose of in accordance with local regulations.

### SECTION 7: Handling and Storage

#### 7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

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### SECTION 8: Exposure Controls / Personal Protection

#### 8.1 Control Parameters

| Chemical Name                   | Limit Type  | Country | Exposure Limit   | Information Source   |
|---------------------------------|-------------|---------|--|--|
| Hydrochloric Acid (7647-01-0)   | TLV-Ceiling | USA     | 2 ppm Ceiling  | ACGIH - Threshold Limit Values - Ceilings (TLV-C)                      |
| Hydrochloric Acid (7647-01-0)   | PEL-Ceiling | USA     | 5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling   | U.S. - OSHA - Final PELs - Ceiling Limits                              |
| Ammonium Dichromate (7789-09-5) | PEL-Ceiling | USA     | "0.1 mg/m <sup>3</sup> Ceiling (applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect, as CrO <sub>3</sub> )" As Chromates [RR-01554-3] | U.S. - OSHA - Final PELs - Ceiling Limits                              |
| Ammonium Dichromate (7789-09-5) | TLV-TWA     | USA     | "0.0002 mg/m <sup>3</sup> TWA (inhalable particulate matter, as Cr(VI))" As Hexavalent chromium inorganic water-soluble compounds [RR-53130-6]   | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Ammonium Dichromate (7789-09-5) | TLV-STEL    | USA     | "0.0005 mg/m <sup>3</sup> STEL (inhalable particulate matter, as Cr(VI))" As Hexavalent chromium inorganic water-soluble compounds [RR-53130-6]  | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Ammonium Dichromate (7789-09-5) | TWA         | USA     | "5 µg/m <sup>3</sup> TWA" As Chromium(VI) compounds [RR-00026-0]   | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Ammonium Dichromate (7789-09-5) | PEL         | USA     | "5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]   | U.S. - OSHA - Specifically Regulated Chemicals with PELs               |
| Ammonium Dichromate (7789-09-5) | TWA         | USA     | "5 µg/m <sup>3</sup> TWA" As Chromium(VI) compounds [RR-00026-0]   | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |

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|                                 |             |     |  |  |
|---------------------------------|-------------|-----|--|--|
| Ammonium Dichromate (7789-09-5) | PEL         | USA | "5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)"<br>As Chromium(VI) compounds [RR-00026-0]  | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Ammonium Dichromate (7789-09-5) | PEL         | USA | 5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)  | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Ammonium Dichromate (7789-09-5) | TWA         | USA | 5 µg/m <sup>3</sup> TWA  | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Ammonium Dichromate (7789-09-5) | PEL-Ceiling | USA | 0.1 mg/m <sup>3</sup> Ceiling (applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect, as CrO <sub>3</sub> ) | U.S. - OSHA - Final PELs - Ceiling Limits                |
| Ammonium Dichromate (7789-09-5) | TWA         | USA | "5 µg/m <sup>3</sup> TWA" As Chromium(VI) compounds [RR-00026-0]   | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Ammonium Dichromate (7789-09-5) | PEL         | USA | "5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)"<br>As Chromium(VI) compounds [RR-00026-0]  | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Ammonium Dichromate (7789-09-5) | PEL         | USA | "5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)"<br>As Chromium(VI) compounds [RR-00026-0]  | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Ammonium Dichromate (7789-09-5) | TWA         | USA | "5 µg/m <sup>3</sup> TWA" As Chromium(VI) compounds [RR-00026-0]   | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Ammonium Dichromate (7789-09-5) | PEL         | USA | "5 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m <sup>3</sup> Action Level (as Cr)"<br>As Chromium(VI) compounds [RR-00026-0]  | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Ammonium Dichromate (7789-09-5) | TWA         | USA | "5 µg/m <sup>3</sup> TWA" As Chromium(VI) compounds [RR-00026-0]   | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |



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|                                 |          |     |  |  |
|---------------------------------|----------|-----|--|--|
| Ammonium Dichromate (7789-09-5) | TLV-TWA  | USA | 0.0002 mg/m <sup>3</sup> TWA<br>(inhalable particulate matter, as Cr(VI))  | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Ammonium Dichromate (7789-09-5) | TLV-STEL | USA | 0.0005 mg/m <sup>3</sup> STEL<br>(inhalable particulate matter, as Cr(VI)) | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |

### 8.2. Exposure Controls

**Engineering Controls:** Use only outdoors or in a well-ventilated area. No specific controls are needed. Normal room ventilation is adequate.

**Respiratory Protection:** In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves.

**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.



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### SECTION 9: Physical and Chemical Properties

#### 9.1. Basic Physical and Chemical Properties

**Appearance:** Yellow-orange liquid

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** Acidic

**Melting/Freezing Point:** Data not available.

**Initial Boiling Point/Range:** Approximately 100°C - Approximately 100°C

**Flash Point:** Data not available.

**Evaporation Rate:** Data not available.

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** Data not available.

**Vapor Density:** Data not available.

**Relative Density:** 1.03

**Solubility:** Miscible

**Partition Coefficient:** Data not available.

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** Data not available.

### SECTION 10: Stability and Reactivity

#### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

#### 10.2. Possibility of Hazardous Reactions

Data not available.

#### 10.3. Conditions to Avoid and Incompatible Materials

Keep only in original container. Most metals, Alkalies, active metals, Cyanides, Sulfides, Sulfites, Metal Oxides, Formaldehyde.

#### 10.4. Hazardous Decomposition Products

Will not occur.



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### SECTION 11: Toxicological Information

#### 11.1. Information on Toxicological Effects

##### **Acute Toxicity - Oral Exposure:**

Toxic if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Rinse mouth. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

##### **Acute Toxicity - Dermal Exposure:**

Not applicable.

##### **Acute Toxicity - Inhalation Exposure:**

Harmful if inhaled. Avoid breathing fumes, mist, vapors, or spray. Use only outdoors or in a well-ventilated area. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

##### **Acute Toxicity - Other Information:**

LD50, Oral, Rabbit (Hydrochloric Acid) 900 mg/kg, details of toxic effects not reported other than lethal dose value. LCLo, inhalation, human: 3000 ppm/5 minutes (Hydrochloric Acid): No toxic effects noted. Ammonium Dichromate is investigated as a tumorigen and mutagen.

##### **Skin Corrosion and Irritation:**

Causes severe skin burns and eye damage. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

##### **Serious Eye Damage and Irritation:**

Causes serious eye irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

##### **Respiratory Sensitization:**

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid breathing fumes, mist, vapors, or spray. In case of inadequate ventilation wear respiratory protection. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Dispose of contents in accordance with local, state, federal and international regulations.

##### **Skin Sensitization:**

May cause an allergic skin reaction. Avoid breathing fumes, mist, vapors, or spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Specific treatment (Wash areas of contact with water immediately). Wash contaminated clothing before reuse. Dispose of contents in accordance with local, state, federal and international regulations.

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**Germ Cell Mutagenicity:**

Suspected of causing genetic defects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Carcinogenicity:**

May cause cancer. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Reproductive Toxicity:**

May damage fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.

### SECTION 12: Ecological Information

**12.1. Ecotoxicity**

Harmful to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations. Toxic to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage. Dispose of contents in accordance with local, state, federal and international regulations.

**12.2. Persistence and Degradability**

Data not available.

**12.3. Bioaccumulative Potential**

Data not available.

**12.4. Mobility in Soil**

Data not available.

**12.5. Other Adverse Ecological Effects**

Data not available.



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### SECTION 13: Disposal Considerations

#### 13.1. Waste Treatment Methods

Data not available.

### SECTION 14: Transportation Information

#### 14.1. Transportation by Land-Department of Transportation (DOT, United States of America)

**Sizes:** 50 mL, 100 mL, 500 mL

**UN Number:** UN1789

**Proper Shipping Name:** Hydrochloric Acid Solution

**Hazard Class:** 8

**Packing Group:** III

**Hazard Label(s):**



#### 14.2. Transportation by Air - International Air Transport Association (IATA)

**Sizes:** 50 mL, 100 mL, 500 mL

**UN Number:** UN1789

**Proper Shipping Name:** Hydrochloric Acid Solution

**Hazard Class:** 8

**Packing Group:** III

**Hazard Label(s):**





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### 14.3 Transportation of Dangerous Goods (TDG, Canada)

**Sizes:** 50 mL, 100 mL, 500 mL

**UN Number:** UN1789

**Proper Shipping Name:** HYDROCHLORIC ACID SOLUTION

**Hazard Class:** 8

**Packing Group:** III

**Hazard Label(s):**



## SECTION 15: Regulatory Information

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Ammonium Dichromate (CAS # 7789-09-5): "5 µg/m<sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m<sup>3</sup> Action Level (as Cr)" As Chromium(VI) compounds [RR-00026-0]

Ammonium Dichromate (CAS # 7789-09-5): 5 µg/m<sup>3</sup> TWA (See 29 CFR 1910.1026, as Cr); 2.5 µg/m<sup>3</sup> Action Level (as Cr)

### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Hydrochloric Acid (CAS # 7647-01-0): 500 lb TPQ (gas only)

Hydrochloric Acid (CAS # 7647-01-0): 5000 lb EPCRA RQ (gas only)

### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Hydrochloric Acid (CAS # 7647-01-0): 5000 lb final RQ; 2270 kg final RQ

Ammonium Dichromate (CAS # 7789-09-5): 10 lb final RQ; 4.54 kg final RQ

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### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Hydrochloric Acid (CAS # 7647-01-0): 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

Ammonium Dichromate (CAS # 7789-09-5): "0.1 % de minimis concentration (includes any unique chemical substance that contains Chromium as part of that chemical's infrastructure except for Chromite ore mined in the Transvaal Region of South Africa and the unreacted ore component of the Chromite ore processing residue (COPR), no de minimis concentration has been assigned to this chemical category, listed under Chemical Category N090)" As Chromium(VI) compounds [RR-00026-0]

Ammonium Dichromate (CAS # 7789-09-5): "0.1 % de minimis concentration (includes any unique chemical substance that contains Chromium as part of that chemical's infrastructure except for Chromite ore mined in the Transvaal Region of South Africa and the unreacted ore component of the Chromite ore processing residue (COPR), no de minimis concentration has been assigned to this chemical category, listed under Chemical Category N090)" As Chromium(VI) compounds [RR-00026-0];

"1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)" As Aqueous ammonia from water dissociable ammonium salts and other sources [RR-47925-4]

Ammonium Dichromate (CAS # 7789-09-5): 0.1 % de minimis concentration (includes any unique chemical substance that contains Chromium as part of that chemical's infrastructure except for Chromite ore mined in the Transvaal Region of South Africa and the unreacted ore component of the Chromite ore processing residue (COPR), no de minimis concentration has been assigned to this chemical category, listed under Chemical Category N090)

Ammonium Dichromate (CAS # 7789-09-5): 1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)

### 15.5. Massachusetts Right-to-Know Substance List

Hydrochloric Acid (CAS # 7647-01-0): Extraordinarily hazardous

Ammonium Dichromate (CAS # 7789-09-5): Present

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Hydrochloric Acid (CAS # 7647-01-0): Environmental hazard

Hydrochloric Acid (CAS # 7647-01-0): Present

Water (CAS # 7732-18-5): "Present" As Ethyl alcohol and water [RR-00802-6]

Water (CAS # 7732-18-5): Present

Ammonium Dichromate (CAS # 7789-09-5): "Environmental hazard" As Chromium compounds [RR-00634-8]

Ammonium Dichromate (CAS # 7789-09-5): "Environmental hazard" As Chromium compounds [RR-00634-8];

"Present (also regulated under Dichromates)" As Bichromates [RR-01620-6]

Ammonium Dichromate (CAS # 7789-09-5): "Environmental hazard; Special hazardous substance" As Chromium compounds, hexavalent [RR-00026-0];

"Environmental hazard" As Chromium compounds [RR-00634-8]

Ammonium Dichromate (CAS # 7789-09-5): "Present" As Chromium compounds [RR-00634-8]

Ammonium Dichromate (CAS # 7789-09-5): "Present" As Chromium compounds, hexavalent [RR-00026-0]

Ammonium Dichromate (CAS # 7789-09-5): "Present" As Chromium compounds, hexavalent [RR-00026-0];

"Present" As Chromium compounds [RR-00634-8]

Ammonium Dichromate (CAS # 7789-09-5): Environmental hazard

Ammonium Dichromate (CAS # 7789-09-5): Environmental hazard; Special hazardous substance

Ammonium Dichromate (CAS # 7789-09-5): Present

Ammonium Dichromate (CAS # 7789-09-5): Present (also regulated under Dichromates)

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### 15.7. New Jersey Worker and Community Right-to-Know Components

Hydrochloric Acid (CAS # 7647-01-0): corrosive

Hydrochloric Acid (CAS # 7647-01-0): sn 1012

Hydrochloric Acid (CAS # 7647-01-0): SN 1012 500 lb TPQ; SN 2909 500 lb TPQ (gas only)

Ammonium Dichromate (CAS # 7789-09-5): "carcinogen" As Chromium(VI) compounds [RR-00026-0]

Ammonium Dichromate (CAS # 7789-09-5): "SN 2245 500 lb TPQ (Category Code N090. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Chromium compounds [RR-00634-8]

Ammonium Dichromate (CAS # 7789-09-5): "sn 2245" As Chromium compounds [RR-00634-8]

Ammonium Dichromate (CAS # 7789-09-5): "sn 3575" As Chromium(VI) compounds [RR-00026-0];

"sn 2245" As Chromium compounds [RR-00634-8]

Ammonium Dichromate (CAS # 7789-09-5): carcinogen

Ammonium Dichromate (CAS # 7789-09-5): carcinogen; mutagen

Ammonium Dichromate (CAS # 7789-09-5): sn 0097

Ammonium Dichromate (CAS # 7789-09-5): sn 2245

Ammonium Dichromate (CAS # 7789-09-5): SN 2245 500 lb TPQ (Category Code N090. Includes any unique chemical substance that contains the named metal as part of that chemical structure)

Ammonium Dichromate (CAS # 7789-09-5): sn 3575

### 15.8. California Proposition 65

Ammonium Dichromate (CAS # 7789-09-5): "carcinogen, 2/27/1987" As Chromium hexavalent compounds [RR-00026-0]

Ammonium Dichromate (CAS # 7789-09-5): "developmental toxicity, 12/19/2008" As Chromium(VI) compounds [RR-00026-0]

Ammonium Dichromate (CAS # 7789-09-5): "female reproductive toxicity 12/19/08" As Chromium hexavalent compounds [RR-00026-0]

Ammonium Dichromate (CAS # 7789-09-5): "male reproductive toxicity, 12/19/08" As Chromium hexavalent compounds [RR-00026-0]

Ammonium Dichromate (CAS # 7789-09-5): carcinogen, 2/27/1987

Ammonium Dichromate (CAS # 7789-09-5): developmental toxicity, 12/19/2008

Ammonium Dichromate (CAS # 7789-09-5): female reproductive toxicity 12/19/08

Ammonium Dichromate (CAS # 7789-09-5): male reproductive toxicity, 12/19/08

### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Hydrochloric Acid (CAS # 7647-01-0): Present (DSL)

Water (CAS # 7732-18-5): Present (DSL)

Ammonium Dichromate (CAS # 7789-09-5): Present (DSL)

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

**All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.**

Hydrochloric Acid (CAS # 7647-01-0): Present (ACTIVE)

Water (CAS # 7732-18-5): Present (ACTIVE)

Ammonium Dichromate (CAS # 7789-09-5): Present (ACTIVE)



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### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Hydrochloric Acid (CAS # 7647-01-0): 231-595-7

Water (CAS # 7732-18-5): 231-791-2

Ammonium Dichromate (CAS # 7789-09-5): 232-143-1

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

May be corrosive to metals. Toxic if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child. Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original container. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

IF SWALLOWED: Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. Specific treatment (Wash areas of contact with water immediately). If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Collect spillage.

Store locked up. Store in corrosive resistant container with a resistant inner liner.

Dispose of contents in accordance with local, state, federal and international regulations.

### 16.2. Miscellaneous Hazard Classes

**Canadian Carcinogenicity Hazard Class:** Not Applicable.

**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.

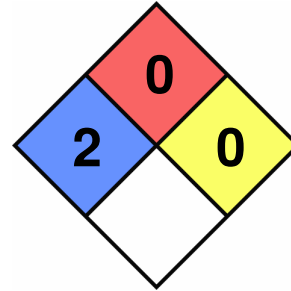
**Biohazardous Infectious Materials Hazard Class:** Not Applicable.



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### 16.3. National Fire Protection Association (NFPA) Rating

Health: 2  
Flammability: 0  
Reactivity: 0  
Special Hazard:



### 16.4. Document Revision

Last Revision Date: 2023-09-11

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.